# T15D12 – (Part 15.3) ****Entropy****

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 15.3.1 State and explain the factors that increase the entropy in a system. (3)
   1. What is entropy?
   2. What is the effect of the following changes on entropy of a system?

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|  | **Effect of change on Entropy** |
| **Change in Temperature** |  |
| **Change in State** |  |
| **Change in Amount** |  |
| **Mixing of Particles** |  |

1. 15.3.2 Predict whether the entropy change (ΔS) for a given reaction or process is positive or negative. (3)
   1. What determines a negative or positive change in entropy?
   2. List a few examples of changes and their associated entropy change:
2. 15.3.3 Calculate the standard entropy change for a reaction (ΔS) using standard entropy values(s) . (2)
   1. What is the equation for entropy change?
   2. Calculate the entropy change that occurs during the complete combustion of ethane:
      1. C2H6(g) + 3 ½ O2(g) 🡪 2CO2(g) + 3H2O(l)